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THE TYPE LOCALITY AND NOMENCLATORIAL STATUS OF PEROMYSCUS MANICULATUS NEBRASCENSIS (COUES)

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Two readily recognizable subspecies of *Peromyscus maniculatus* inhabit the northern Great Plains, *Peromyscus maniculatus osgoodi* in the west and *Peromyscus maniculatus nebrascensis* in the east. *P. m. orgoodi* is the larger, both externally and cranially, and is more grayish (less buffy) dorsally. The subspecific names currently used for these two kinds of mice are misapplied as shown below.

In his account of North American mammals, Baird listed in text (1858:462) the name "Hesperomys sonoriensis, var. nebrascensis" without description, definition or indication and the name as used by Baird is thus a nomen nudum. Nineteen years later, Coues (1877:79) listed the same name in synonymy under Hesperomys leucopus sonoriensis as "Hesperomys sonoriensis var. nebrascensis, Baird, M. N. A. 1857, 462 in text (based on the below-enumerated Nebraskan examples)." Osgood (1905:77 and 1909:78-79) contended that nebrascensis of Coues also was a nomen nudum, and that a redescription of nebrascensis by Mearns (1890:287), based on a specimen from Calf Creek, Montana, was in fact the original description for the western subspecies from the northern Great Plains. Accordingly, Osgood described (1905:77) the eastern subspecies under the name Peromyscus luteus (type from Kennedy, Cherry Co., Nebraska). However, as Mearns (1911:102) pointed out, Coues gave brief critical remarks on coloration (op. cit.:28) and on length of tail (op. cit.:80), and listed measurements (op. cit.:80-82) for some specimens (which at that time he referred to Hesperomys leucopus sonoriensis), thereby satisfying the minimal requirements for a valid description. Mearns applied the name nebrascensis of Coues to the eastern subspecies (because he assumed it was based on specimens from Nebraska) and proposed a new name, Peromyscus maniculatus osgoodi (type from Calf Creek, Custer Co., Montana) for the western mice. As indicated above, the arrangement proposed by Mearns is currently in use.

Exactly what Coues intended to indicate as the "below-enumerated Nebraskan examples" is not clear. From 1854 until 1863 Nebraska Territory contained, in addition to what is now Nebraska, the southern half of Wyoming. Most of the specimens from the northern Great

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Plains available to Coues were obtained in the period 1854-1863. A large proportion of these mice were from what is now southern Wyoming, but many of these were probably regarded by him as being from Nebraska, because they had been collected in Nebraska (sensu lato) and in many instances probably were noted as being from there on the specimen labels. In his list of specimens examined Coues usually did not indicate localities by state, perhaps because he was not sure in all instances where specimens actually originated. He did list several specimens from what is now Nebraska but did not identify them with the State. The only specimens that he did identify with Nebraska were two (USNM 4310-11) from "Deer Creek, Nebr." and 18 (USNM 10401-18) from "Nebraska"." Subsequent workers (Osgood, 1909; Mearns, 1911) quite naturally assumed that Coues' "below-enumerated Nebraskan examples" were the two Deer Creek specimens because 1) they were the first Nebraskan specimens listed by him, and 2) they were the only specimens he identified with a precise locality in Nebraska. Osgood (op. cit.: 78-79) went so far as to say, "... Coues ... states that Baird based the name upon two specimens from Deer Creek, Nebraska." Coues stated nothing of the sort and, in fact, the specimens from Deer Creek were not even in existence at the time of publication (1858) of Baird's monograph, having been collected in January, 1860. Nonetheless, because Coues' description of nebrascensis validates that name, even though he obviously did not intend his description to do so, subsequent revisors were at liberty to designate as the type locality any locality in Nebraska (sensu lato) from which Coues listed specimens.

This was done, as I see it, by Osgood (loc. cit.) and Mearns (op. cit.:102), acting as revisors, with their mention of Deer Creek, and the latter has been accepted as the type locality for P. m. nebrascensis by all subsequent authors known to me (see, for example, Miller, 1912:147; Miller, 1924:329; Cockrum, 1952:172; Miller and Kellogg, 1955:482). The type locality usually has been listed by later workers as "Deer

Creek, western Nebraska."

Having established "Deer Creek, Nebr." as the type locality of P. m. nebrascensis, there remains the problem of the precise location of Deer Creek. Miller and Kellogg (loc. cit.), without comment, identified it as the Deer Creek in Sheridan County, Nebraska. The syntypes of nebrascensis (USNM 4310-11) were contained in a lot of 40 mammal specimens obtained from Deer Creek by the Yellowstone exploration party of Capt. W. F. Raynolds, Topographic Engineers, including collectors F. V. Hayden and G. H. Trook, between November 23, 1859, and February 21, 1860 (see original catalogue, United States National Museum, nos. 4236-61, 4271, 4296-97, 4303-08, 4310-12, 4315). Raynolds' party went into winter quarters on or about October 18, 1859, along Deer Creek, approximately five miles from its mouth, in what is now Converse County, Wyoming (see Senate Executive Documents, 2nd Session of the 40th Congress, 2(No. 77):1-174, with fold-out map, 1868, for a documented history of the party). They broke winter quarters on May 10, 1860. The two specimens of Peromyscus in question were obtained on January 17, 1860 (USNM 4311, original no. 79), and January 19, 1860 (USNM 4310, original no. 80). It should be mentioned that Baird erroneously listed the dates of collection of these two specimens as June 17 and June 19, 1860, when he recopied from the original

catalogue into the catalogue currently in everyday use at the U. S. National Museum. I do not know whether this error on Baird's part contributed to the subsequent confusion concerning the exact location of Deer Creek.

Several of Osgood's co-workers in the Biological Survey were aware of the correct location of Deer Creek. Nelson (1909:78 and 207) recorded from Wyoming lagomorphs contained in the original Deer Creek collection. Goldman (1910:105) recorded a Neotoma cinerea orolestes from the original collection from "Deer Creek, Converse County", Wyoming. Hollister (1916:19) correctly listed one of the two original Cynomys ludovicianus ludovicianus from Deer Creek, Wyoming. Osgood, nevertheless, seemed to think that the Deer Creek concerned was actually in Nebraska. He assigned (1909:77) all maniculatus available to him from eastern Wyoming to his P. m. nebrascensis [currently equals P. m. osgoodi], but he listed (op. cit.: 79) as from Nebraska a single specimen from Deer Creek under his P. m. luteus [currently equals P. m. nebrascensis]. This oversight on Osgood's part may have contributed to the incorrect assumption by subsequent authors that the Deer Creek mentioned by Coues was in what is now Nebraska. Actually the type locality of P. m. nebrascensis is in Converse County, Wyoming, within the geographic range now associated with P. m. osgoodi, not in Sheridan County, Nebraska.

As noted above, Osgood listed one of the syntypes of *nebrascensis* in 1909. I have searched the collections of the U. S. National Museum for the specimens from Deer Creek but neither is now to be found. Poole and Schantz (1942) did not list either of the specimens and I presume they are no longer in existence.

I have examined a series of *Peromyscus maniculatus* from the vicinity of Casper, Natrona County, Wyoming (KU 15593-96, 27506-14), approximately 23 miles west of Deer Creek and another series from the vicinity of Bill, Converse County, Wyoming (KU 32658-69), northeast of Deer Creek. The mice in these series agree with other specimens seen by me from the plains of eastern Wyoming and eastern Montana, and from extreme northwestern Nebraska, in large cranial and external size and buffy-gray coloration dorsally. Therefore, *Peromyscus maniculatus nebrascensis* (Coues, 1877) is the valid name for the mice of the western part of the northern Great Plains that are currently known as *P. m. osgoodi*, whereas *Peromyscus maniculatus luteus* Osgood, 1905, is the correct name for the smaller, more buffy-colored mice to the east that are currently known as *P. m. nebrascensis*.

Synonymies (original description followed by other pertinent citations in chronological order) and geographic ranges (modified from Miller and Kellogg, 1955;482) of nebrascensis and luteus are as follows:

Peromyscus maniculatus nebrascensis (Coues)

Hesperomys sonoriensis var. nebrascensis Coues, in Coues and Allen, Monographs of North American Rodentia, U. S. Geol. Surv. Terr., 11: 79, August, 1877, syntypes from Deer Creek, approximately five miles from its mouth, Converse Co., Wyoming.

Hesperomys leucopus nebrascensis, Mearns, Bull. Amer. Mus. Nat. Hist., 2:285, February, 1890 (a redescription of nebrascensis on p. 287, based on a specimen from Calf Creek, Custer Co., Montana).

Peromyscus texanus nebrascensis, J. A. Allen, Bull. Amer. Mus. Nat. Hist., 8:251, November, 1896 (part); Miller and Rehn, Proc. Boston Soc. Nat. Hist., 30:85, December, 1901.

Peromyscus maniculatus nebrascensis, Osgood, N. Amer. Fauna, 28: 75, April 17, 1909.

Peromyscus maniculatus osgoodi Mearns, Proc. Biol. Soc. Washington, 24:102, May 15, 1911, type from Calf Creek, Custer Co., Montana; Miller, Bull. U. S. Nat. Mus., 79:147, December 31, 1912; Miller, Bull. U. S. Nat. Mus., 128:328, April 29, 1924; Miller and Kellogg, Bull. U. S. Nat. Mus., 205:482, March 3, 1955.

Geographic distribution.—Southern Saskatchewan and southern Alberta, south through most of Montana and most of Wyoming; parts of western North and South Dakota, northwestern Nebraska and eastern Colorado, south through the Oklahoma Panhandle to northwestern Texas; northeastern Utah and adjacent parts of Colorado and Wyoming.

Peromyscus maniculatus luteus Osgood

Peromyscus luteus Osgood, Proc. Biol. Soc. Washington, 18:77, February 21, 1905, type from Kennedy, Cherry Co., Nebraska.

Peromyscus texanus nebrascensis, J. A. Allen, Bull. Amer. Mus. Nat. Hist., 8:251, November, 1896 (part).

Peromyscus maniculatus luteus, Osgood, N. Amer. Fauna, 28:77, April 17, 1909.

Peromyscus maniculatus nebrascensis, Mearns, Proc. Biol. Soc. Washington, 24:102, May 15, 1911; Miller, Bull. U. S. Nat. Mus., 79:147, December 31, 1912; Miller, Bull. U. S. Nat. Mus., 128:328, April 19, 1924; Miller and Kellogg, Bull. U. S. Nat. Mus., 205:482, March 3, 1955.

Geographic distribution.—Southwestern North Dakota and most of western South Dakota, south through central and southwestern Nebraska, western Kansas and extreme eastern Colorado, western Oklahoma and the eastern parts of the Texas Panhandle.

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